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Amdt. Dated June 6, 2005

REMARKS/ARGUMENTS

Claims 4-32 were presented for examination. In the Action mailed February 9, 2005, claims 4-6, 8, 11-13, and 16-29 were rejected under 35 U.S.C. 103(a) as being unpatentable over Roses (U.S. PG-PUB No. 2003/0055871) in view of Cheatle (U.S. PG-PUB No. 2002/0191861); claims 7, 9, 10, 14 and 15 were rejected under 35 U.S.C. 103(a) as being unpatentable over Roses in view of Cheatle and further in view of Mayle et al (U.S. Patent 6,018,774); and claims 30-32 were rejected under 35 U.S.C. 103(a) as being unpatentable over Cheatle in view of Gustafson et al (U.S. PG-PUB No. 2002/0025085). Claims 4, 8, 11, 17, 25, and 27-30 have been amended and it is believed that all pending claims are now in condition for allowance.

Roses discloses a Web-based system for allowing a user to select a product template, select an image, and place the image in the template to create a product design. Roses contains no teaching about the possible use of images having either a minimum image area or an ideal image area.

Cheatle discloses a system for performing automated processing of a digital image to identify regions of the image that are assumed to be of interest. Cheatle describes the automatic identification of image portions referred to in Cheatle as a minimum crop boundary and a maximum crop boundary.

Mayle et al describes a system for creating an electronic message by combining text and images. Mayle et al discloses sizing an image before a cropping operation and cropping equally from opposite edges of an image.

In the Action, the Examiner takes the position that claims 4-6, 8, 11-13, and 16-29 are obvious in view of Roses and Cheatle. As discussed below, Applicant respectfully disagrees.

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As indicated in Cheatle paragraph 2, Cheatle is directed to a system that intentionally uses automated processing for the express purpose of avoiding the need for manual cropping decisions. Cheatle is directed to trying to assist the inexperienced or hurried photographer by eliminated the need for the photographer to spend time carefully composing a photograph before taking the picture. Cheatle describes automatically analyzing an image and applying general compositional rules to calculate how the image should be cropped to create a version having better composition. The technique involves various blurring and combining steps to create a saliency image (Fig. 3f) from the original image (Fig 3a). Further processing identifies rectangles around areas in the image that are assumed to be of interest, such as rectangles 60 and 61 described in Cheatle paragraph 103 and shown in Fig. 5a, and around regions identified as undesirable "must exclude" areas, such as rectangles 64 and 66. Yet further processing, as described in Cheatle paragraph 104, defines one or more maximum crop boundaries. Finally, as shown in Figs. 6b and 7 and described in Cheatle paragraphs 107-120, more technical processing is performed to arrive at a crop candidate having boundaries that are somewhere between the maximum crop boundary and the minimum crop boundary. The processing of Cheatle is of a purely technical, mechanical, and mathematical nature.

By contrast, Applicant's claims 4, 8, 11, 17 and 27-29, as amended, recite retained images having manually selected image portions. Cheatles "minimum crop boundary" and "maximum crop boundary" are not equivalent to Applicant's "minimum image area" and "ideal image area". As explained at Applicant's paragraph 62, the minimum image area and the ideal image area are selected by a designer "based on the designer's expertise, aesthetic considerations and the specific visual content and subject matter of the image."

Referring specifically to claim 4, a comparison of the disclosures of Cheatle and Applicant makes it clear that the "minimum crop boundary" described by Cheatle is not equivalent to, and does not teach, the claimed "minimum image area". The minimum crop boundary of Cheatle is a rectangle that calculated to surround a feature of the image,

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as determined by color transitions or other characteristics or properties of the pixels of the image. By contrast, referring to Applicant's paragraph 63, the minimum image area is an area selected by a designer "to be the smallest portion of the base image that the graphic designer believes is a meaningful or coherent image".

To briefly illustrate the difference, given an image showing an object, the Cheatle process would analyze the image, locate the object, and create a minimum crop rectangle around it. By contrast, in Applicant's claimed system, a human designer, capable of making aesthetic judgments and decisions not contemplated or possible with the automated system of Cheatle, would view the image and manually select a minimum area. For example, because typically it is not necessary to see an entire common object in order to readily recognize and identify it, the designer might choose to define the minimum image area to show only a portion of an object. As another example, the designer might find a portion of the background area of the image to be desirable and choose to entirely omit a prominent element that Cheatle would assume to be of interest and automatically surround with a minimum crop boundary. Neither Roses nor Cheatle, viewed either separately or in combination, show or suggest an automated design method using "a plurality of retained images having at least a manually selected image portion representing a minimum image area".

Referring now to claim 8, a comparison of the disclosures of Cheatle and Applicant makes it clear that the "maximum crop boundary" described by Cheatle is not equivalent to Applicant's claimed "ideal image area". In Cheatle, the maximum crop boundary, just as the name suggests, is simply the maximum possible size of the cropped image. There is no notion or suggestion in Cheatle that the maximum crop boundary actually represents what a viewer would consider to be the most desirable version of the image. By contrast, as discussed in Applicant's paragraph 63, Applicant's ideal image area is the "portion of the base image that the graphic designer believes should, to the extent possible, be used". In other words, Applicant's ideal image area does not define a maximum, but is rather the portion of the image that was identified by the designer as the most desirable portion that should be used, if possible. Neither Roses nor Cheatle,

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viewed either separately or in combination, show or suggest an automated design method using "a plurality of retained images having at least a manually selected image portion representing an ideal image area".

The above comments regarding claims 4 and 8 also apply to independent claim 11. Roses and Cheatle do not show or suggest an automated design method using "a plurality of retained images having at least a manually selected image portion representing a minimum image area and a manually selected image portion representing an ideal image area".

The above comments regarding claim 4 also apply to independent claim 17. Roses and Cheatle do not show or suggest an automated cropping method for an electronic image having a manually predetermined portion representing a minimum image area.

Regarding independent claim 19, the Examiner again equates Cheatle's "maximum crop boundary" with Applicant's "ideal image area". As mentioned above, the purpose and intended use of these two areas are completely different. Applicant's ideal image area is a desirable goal, not a hard limitation like Cheatle's maximum crop boundary. Nothing in Roses or Cheatle suggests step (c) of claim 19, which recites that, "if a cropped version of the image cannot be created at step (b) and if a cropped version can be created such that the cropped version meets the conditions of (i) filling the image container and (ii) having at least a predetermined minimum image resolution, creating a corresponding cropped version". In other words, step (c) says that if a cropped image cannot be created at step (b) (that is, using only content from within the ideal image area), then a cropped image may be created at step (c) such that the cropped image includes a portion of the image that is outside of the ideal image area. Even if, for the sake of argument, Cheatle's maximum crop boundary were assumed to be equivalent to the ideal image area, Cheatle does not teach creating a cropped version of an image that includes any part of the image that is outside of the maximum crop boundary.

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Regarding independent claim 22, similar comments as those above regarding claim 19 apply. Cheattle's "maximum crop boundary" is not equivalent to Applicant's "first image area". Step (c) of claim 22 recites, if a cropped version cannot be created at step (b) using only content within the first image area, then a cropped version can be created using image content that is outside of the first image area. Cheattle does not teach creating a cropped version of an image that uses any portion of the image that is outside of the maximum crop boundary.

The above comments relative to claims 4, 8 and 11 are likewise applicable to independent claims 27-29. Neither Roses nor Cheattle, viewed either separately or in combination, show or suggest manually selected image portions representing a minimum image area and an ideal image area.

In view of the above comments regarding independent claims 4, 8, 11, 17, 19 and 22, dependent claims 5-7, 9-10, 12-16, 18, 20-21, and 23-26 are likewise considered to be patentable over the cited references.

Claims 30-32 were rejected as being unpatentable over Cheattle in view of Gustafson. Gustafson discloses a web-based system for allowing a user to design custom imprinted items, such as pads of paper. The Gustafson image cropping tool, shown in Fig. 6-1, allows the user to use crop size menu 6200 to select one of a plurality of cropping areas of different sizes, such as 6400. As indicated in Gustafson paragraph 64, menu 6200 is not related to any particular portion of any image. Menu 6200 simply provides a variety of generic cropping areas that must be placed by the user at the desired location in the image. As stated in paragraph 64 of Gustafson, after the user has selected a cropping area, "the user may then move the engaged cropping area 6400 for determining a desired portion of the image 6300". Gustafson makes no teaching or suggestion about how cropping menus might possibly be used in connection with a method for preparing an image for use with an automated cropping system.

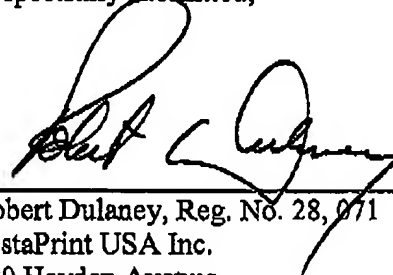
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Further, Applicant respectfully submits that there would be no motivation for these references to be combined. Cheatle and Gustafson are inherently at cross-purposes. The Examiner states that the motivation to adapt Cheatle in view of Gustafson would be "so that the processing of an image to determine a minimum crop rectangle need only be performed once per image and thus reduce redundant processing", but processing load is of no concern to Cheatle. The whole thrust of Cheatle is directed to a system that intentionally uses automated processing for the purpose of avoiding manual cropping operations, which Cheatle describes in paragraph 2 as being time consuming and inconvenient. There would be no motivation to modify Cheatle to add manual cropping operations to a system whose expressed purpose is the elimination of manual cropping operations.

In summary, it is believed that all pending claims are now in condition for allowance and favorable action on claims 4-32 is requested.

The fee for a one-month extension of time to file a response is submitted herewith. If any additional fee is required by this amendment, the fee may be charged to Deposit Account No. 502765.

Respectfully submitted,



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